

Applied Positive Psychology

Professor Dilwar Hussain

Department of Humanities and Social Sciences

Indian Institute of Technology, Guwahati

Week 6

Lecture 20: Posttraumatic growth: Theories and interventions

I welcome you all to Module 6 of the course, titled "Applied Positive Psychology." We are now discussing Module 6 which is about resilience and post-traumatic growth. Today is lecture number 17, and it is the second lecture of Module 6. Today, we will discuss the concept of post-traumatic growth. We will focus on some of the theoretical concepts and then discuss some possible interventions.

Before we discuss today's lecture, let me provide a brief recap of the last lecture, which was also part of the same module. The previous lecture focused on the concept of resilience. In two parts of this lecture, we discussed the various concepts associated with resilience in detail. We defined what resilience is and discussed the different trends in research, including waves of research in the field of resilience. We also discussed some of the foundational studies on resilience that laid the groundwork for subsequent waves of research. We also discussed how resilience is connected to various positive psychology concepts, and ultimately, we explored how to build resilience using a skill-based model as an example. These are some of the key points we discussed in the last lecture.

Today, we will discuss the concept of post-traumatic growth. In short, it is called PTG. We will also discuss some related concepts, talk about the different domains of post-traumatic growth. We will study what kind of traumatic events lead to post-traumatic growth, we will also discuss some of the models of PTG, we will then discuss some of the literature and empirical findings related to PTG, well-being, and wisdom. Ultimately, we will also discuss how to facilitate post-traumatic growth. Let's begin today's lecture.

So, when we talk about post-traumatic growth, as the name suggests, it's something that happens after the trauma. When a person experiences a traumatic event, a challenging situation, or adversity in their life, various possible outcomes can occur, depending on how they respond to the problem. So, when we face a traumatic event, a challenging situation, or adversity in life, some of the possibilities are listed in this graph. When we discuss this line, it represents the baseline functioning of a person. This is the level of functioning of the person. So, we study, what is the level of functioning before the event, what is the level

of functioning of a person? So, this line indicates the functioning level. Now, when a traumatic event or something negative happens in one's life, this functioning level—here it is illustrated by the functioning level—drastically decreases because that event disrupts the entire mental and physical functioning. As a result, a decline in functioning occurs.

When this decline in functioning happens, with the passage of time, how that person then deals with that post-traumatic event or post-traumatic situations in life can lead to various outcomes. For example, with the decline of functioning, one possibility is that the person can enter a stage known as a succumbing stage. The person is unable to recover from the event and is overwhelmed by it; this is one possible outcome, known as succumbing. People generally discuss concepts like PTSD and other disorders that can fall into this category. The person acquires a specific disorder simply because they are too overwhelmed by the impact of the event and not able to recover immediately, or at least for some time.

Another possibility is that the person survives the condition, which is better than the succumbing stage. However, then survival is with impairment, so the person survives but still has a lot of functional issues, which can also come under things like PTSD. Here, the symptoms may be slightly less severe than in the succumbing stage.

Another possibility that happens after the decline in functioning is that the person recovers and returns to the baseline level of functioning, or the level of functioning at which the person was functioning before the event. We can also refer to this as the recovery state. The person completely recovers from the impact of the event, a phenomenon also known as resilience. One of the significant ideas of resilience that we discussed in the last class is how quickly a person can bounce back to their previous level of functioning after an adversity occurs. This is the condition where, when a person recovers to their prior level of functioning, we can refer to it as a state of resilience. Now, there is another possibility that occurs for many people after a traumatic event: they not only return to their previous level of functioning, but they actually grow beyond it. So, their functioning level actually increases in a certain sense after the traumatic event. It cannot be a general statement, but in certain aspects of functioning, the person actually improves to a higher level than their previous level of functioning. So, the functioning level increases. This is a case where the concept of post-traumatic growth can be applied. So, these are the different possibilities that can occur after encountering a traumatic event, which may lead to different disorder stages like PTSD, one can also recover, which is a resilient stage, and the event itself can also transform a person, and the functioning level can actually increase, which is a case of post-traumatic growth. So, this is just the background.

These are concepts related to various possible outcomes, and where post-traumatic growth fits into this whole spectrum of outcomes. Now, let's examine the idea of post-traumatic growth in its entirety. Now, when we talk about post-traumatic growth, some people also

use the term stress-related growth, but post-traumatic growth is more appropriate and more commonly used in the literature. Many philosophical statements which capture the gist of post-traumatic growth. For example, Nietzsche said that what does not kill us makes us stronger. So, any problem, any difficulty, any adversity in life, if it is not killing you, then it is also allowing you to become stronger, because you are facing and struggling with difficulties, that will make you strong. Other statements like, "the pain of yesterday is the strength of today." So, pain gets converted into strength. These are the statements, some of which are commonly understood in folklore, literature, and religion, that capture the essence of post-traumatic growth.

Now, what is post-traumatic growth in terms of defining it conceptually? So, the research shows, is that in addition to experiencing various negative symptoms of trauma and stress, like PTSD and other possible outcomes, many people also report various positive changes in their lives as a result of facing traumatic events. The research shows that people obviously experience various psychological disorders after a traumatic event. One possibility is PTSD symptoms and other things that are commonly discussed extensively in literature. However, research also indicates that many individuals, after experiencing a traumatic situation, often undergo specific positive changes in their life, which are collectively called post-traumatic growth.

So these positive psychological changes experienced by people because of struggling with highly challenging life circumstances are known as post-traumatic growth. So, this term was introduced by Tedeschi and Calhoun in 1995, coined for the first time. So, any positive psychological change that people experience after encountering challenging adversities in life or traumatic events can be called post-traumatic growth. Now, this post-traumatic growth happens not because of trauma itself, but because of the struggle with highly challenging life circumstances.

So, people try to cope with the problematic situation or its aftermath, and in the process of working through it, they sometimes emerge stronger. This is the conceptual definition of the term Tedeschi and Calhoun also noted that suffering and distress can be a potential source of positive change. The idea is that when we suffer or go through negative phases in life, it can also provide an opportunity for certain positive transformations; however, this is just a possibility and not something that will necessarily happen to everybody. One of the main ideas behind post-traumatic growth, in terms of concept, is that it is not just a direct result of trauma but is somewhat related to how the individual struggles as a result of the trauma. Trauma may not directly cause post-traumatic growth; otherwise, everybody should experience it.

Experienced post-traumatic growth is the aftermath of trauma, how people deal with the

situation, and how they struggle with the new realities of life; that is the main factor that leads to post-traumatic growth or not experiencing post-traumatic growth. Now, when we talk about post-traumatic growth, it is not just about coping with a new situation or coping with a traumatic situation. Coping is necessary; obviously, some extent of coping is needed, but it is not sufficient to achieve psychological growth or post-traumatic growth. Some level of coping is required, but post-traumatic growth is not just about coping; it is about some transformation that is happening. So, thriving, or here it is used in conjunction with terms like post-traumatic growth, represents more than a return to equilibrium following a challenge.

The person not only returned to the previous level, but they also moved beyond it, as shown in the diagram. Now, some of the research indicates that PTG experiences are relatively common and outnumber the reports of psychiatric disorders. Research shows that these post-traumatic growth experiences are quite common. These are not like the rare phenomena that some people experience. Research shows that a lot of people experience some form of post-traumatic growth. It doesn't necessarily have to be a dramatic transformation or something like that, but people very commonly experience some form of post-traumatic growth. In fact, more than the experience of psychiatric disorders. For example, one study reported that approximately 30 to 90% of the survivors of traumatic events, depending on the different studies, reported at least some positive changes following trauma. So, this is quite commonly experienced by ordinary individuals. So, this is not something scarce. Therefore, this phenomenon holds significant relevance in the lives of ordinary individuals. This concept is not new in terms of its conceptual understanding. This has been a long-standing aspect of human knowledge throughout history. Every religion discusses the idea of transformation as a possibility that can follow suffering and difficulties in one's life. Philosophers have been discussing it; folklore and literature have been discussing it. So, it's not a new concept in terms of ideas. I know that all these things—religion, literature, folklore, and philosophy—have emphasized the transformative power of human suffering and difficulties in one's life. But this is a relatively new concept in terms of empirical research in the field of psychology, where people started collecting data and asking whether they experience post-traumatic growth. In a more empirical and measurable sense, this is not so recent, because the research began in 1995, when the term was first coined. So, at least two decades have passed. A considerable amount of research has been conducted in this area. In terms of empirical research, this is a relatively recent development in the field of psychology; however, conceptually, this phenomenon has always been present in the minds of people, influencing their understanding, particularly in religions, philosophies, and folklore, among other areas. The presence of post-traumatic growth does not mean the absence of distress both can co-occur. So, this is also very important: when we talk about post-traumatic growth, we are not saying that after post-traumatic growth, the person will appreciate suffering and

trauma, and that they will not be influenced by trauma and the difficulties of life, that is not so. They can both exist together. The person can grow, but at the same time, they can also suffer the consequences of the adverse events in their life. So, they are not like they have grown so that they will appreciate the trauma and suffering. That is not the case. Both can coexist simultaneously. That is one of the ideas that the absence of suffering is not what PTG leads to. That may not happen. We will also see it in the model. So post-traumatic growth can be considered an outcome as well as a process.

So it is both a process and an outcome. People continue to grow, and this growth also emerges as an outcome. Now, let us examine some of the other related concepts discussed in the psychology literature, as many ideas are similar to post-traumatic growth but are technically distinct. Let us examine some of these concepts so that we can distinguish between them. One term is called thriving, which is sometimes used synonymously; however, it is technically distinct from post-traumatic growth. So thriving is defined as the psychological state in which individuals experience both a sense of vitality and a sense of learning. It is a very positive and thriving state, where people thrive who are experiencing vitality, a sense of learning, and growth in one's life. So, we can say that a person is in a state of thriving that means the person is experiencing vitality, development, and expansion in their life. So, that can be some of the indicators of thriving.

Now, although thriving can be associated with growth, it is more often understood as an everyday occurrence and is not usually linked to trauma. Thriving is generally used in the sense of everyday occurrences of life, that person can succeed in everyday life situations. It does not necessarily mean that a person should thrive in the context of trauma. Trauma is not necessarily linked to the concept of thriving. One can thrive in everyday life situations. This differs from the concept of post-traumatic growth. In post-traumatic growth, growth occurs only after the traumatic event. So, it is always discussed in the context of trauma. PTG is always addressed in the context of trauma or significant adversity. In thriving, it is not necessarily linked to trauma or adversity. It can happen in everyday life situations. So, this is how these two terms are technically different. Another term very similar to thriving is also called flourishing. This is also technically a little different from post-traumatic growth. So, as with thriving, flourishing is a broad term associated with well-being. Flourishing individuals are characterized by emotional vitality, functioning positively in both private and social realms of life. A very similar term to thriving. The person is again vital, which is identical to thriving. It is mainly used in the context of high well-being in one's life. When a person experiences high well-being in their life, we can say that their life is flourishing. The person is functioning and experiencing life in a very positive way and is functioning very positively in both personal and social aspects of life. So, we can say that the person has a very flourishing life.

Similarly, thriving, flourishing, and post-traumatic growth all involve positive functioning and experiences. PTG is also about positive functioning and experiences. All three terms are used in a positive sense to describe functioning and life experiences; however, PTG occurs only after traumatic events, whereas thriving and flourishing may or may not happen after adverse events. Thus, these three terms differ in this way. Flourishing and thriving can occur in everyday life situations; one can flourish in the normal course of life and does not necessarily have to face trauma or other challenges. So, for thriving and flourishing, trauma does not necessarily have to be present. It can also happen after trauma, but PTG is always discussed in the context of trauma. Trauma must be present to experience post-traumatic growth. So, that's the technical difference. So, PTG involves transformations that come through struggle with post-traumatic situations. So, the idea of transformation is less prominent in thriving and flourishing. Thriving and flourishing are akin to someone expanding and growing in life. The transformation idea is not very specifically linked to these terms. Transformation occurs when there are sudden or dramatic changes in one's life, often triggered by a specific event or series of events. So, that is what transformation is all about. In thriving and flourishing, the word "transformation" is not necessarily used, or the context of transformation may not be particularly suitable. It is more appropriate in the context of post-traumatic growth. Now, some other terms that people sometimes use or get confused with post-traumatic growth are resilience and recovery. Resilience is something we talked about in detail in the last lecture. So, I will mention how it differs from PTG. PTG differs from the concept of resilience. Resilience is the ability to bounce back and continue with life after experiencing hardships. So, resilient people return to a baseline level of functioning. Generally, when we discuss resilience in a broader sense, it refers to a person's ability to bounce back.

So let us say, based on the baseline level of functioning; when something negative happens, and the person quickly returns, you know. Therefore, the concept of resilience is applied to the ability to recover quickly. In the broader literature on resilience, positive transformation is also sometimes used; however, resilience is typically employed in the context of returning to or maintaining a previous level of functioning. Post-traumatic growth, on the other hand, is that a person not only returning to the baseline level but also going above the baseline level in terms of functioning. Therefore, the person's functioning increases, as mentioned in the earlier diagram.

So, PTG, on the other hand, is not about returning to the baseline; rather, it is an experience of profound and significant improvement in a person's life. People find those transformations substantial and profound for many. So, this is how resilience differs from post-traumatic growth. Resilience primarily refers to stability in the context of trauma. You become stable and return to a normal level rather than a trajectory of increased positive functioning, which is about post-traumatic growth. The concept of recovery is also closely related to resilience. Recovery is also about returning to the prior level of functioning.

Slowly, people recover from an adverse event and return to their everyday lives. So that process is called recovery. Again, it is not about transformation. It is not about enhancing functioning and the like, which the PTG discusses.

Now, let us talk about what the domains of post-traumatic growth are in terms of how people report post-traumatic growth. What are the areas in which people report post-traumatic growth, or after that trauma, what kind of growth do people experience? Research on various studies shows that there could be five possible domains of post-traumatic growth in which people report growth. The first dimension is an increased appreciation for life in general. Now, it may seem counterintuitive or paradoxical that, after a traumatic event, people would appreciate life. Now, if you think about it, certain traumatic events can increase the appreciation for life. Especially when people come back from near-death experiences, such as a fatal accident or surviving chronic illnesses like cancer, people generally associate death with such diseases, making it difficult to recover. Generally, people report an increased appreciation for life because they realize its importance when they face death and then come back. They understand that life can be very transitory. It can go at any time. So, the value of life increases. They start enjoying the small things in their life. Feelings of being lucky and make the best of whatever remaining time they have. In that sense, sometimes a negative or traumatic event can lead to a transformation in people's mindset, increasing their appreciation for life. They see life from a newer perspective. Earlier, they might have taken too many things for granted. Now, they may think that all the small things in their lives can be more critical.

They may give more importance to the emotional aspects of their lives, such as relationships. In a general sense, people often report an increased appreciation for life after a traumatic event. For some individuals, this can be a transformative experience, shifting their thought processes. The second possible dimension is a more intimate and meaningful relationship with others. Many people report that after a traumatic event, their relationships with others or specific individuals become much deeper and more meaningful. Now we can understand that we often appreciate the value of relationships or the value of other individuals in our lives only when we face difficulties. It is only in difficult situations that you come to know who your real friends are, who your real relatives are, and who are just fake people in terms of not being very deeply connected to you. Traumatic events teach that lesson. So, do people realize the importance of specific individuals after a traumatic event, or is it only in a situation of trauma that they recognize the significance of these individuals in their lives and their connections become much deeper and more intimate with those individuals because they realize the role these people play in their lives more when adverse situations occur. Because when everything goes well, people can be around you and support you. However, it becomes a difficult situation when you encounter real people and those with whom you have a meaningful relationship. People often report that

they realize the importance of relationships after a traumatic event, finding genuine friends and experiencing an increased sense of compassion and empathy. Sometimes, people also develop more compassion and empathy after traumatic events because they realize the kind of difficulties they face. When they encounter similar situations faced by others, they can better understand what those individuals are going through. So, their perspective also grows; their sense of compassion and empathy also grows. These are the things where sudden changes, which can be positive, are also experienced by people after a traumatic event.

The third dimension in which people report PTG is a sense of personal strength. This is something with which we can very commonly connect to the concept of post-traumatic growth, that people become much stronger when they face problems in their lives. People don't become strong psychologically if they only face very comfortable situations. From the comfort of life, people don't grow. People grow only when they face difficulties and adversities in their lives, because it is at that time that their potential is fully realized. Many people report a sense of personal strength after traumatic events, as they recognize their previously hidden capabilities. They come out best when you know the adversities of life and your potential, which increases your ability to deal with and handle things. You realize these things when you face certain difficult situations. Under ordinary conditions, many capabilities and strengths are not required. They are only necessary when a difficult situation arises and those potentials come out and people realize I can do this, too. They were not at all aware that they had those capabilities. This is referred to as a sense of personal strength.

The fourth dimension is new possibilities for one's life. Many people discover new dimensions or opportunities in their lives, as well as new directions, after experiencing traumatic events. In terms of how they've completely changed the pathways of their lives, altered their careers, and so on, following a specific traumatic event. So, a lot of these examples can also be found for people who experience certain traumatic events and then take career paths that are related to these traumatic events. For example, somebody who survives cancer realizes what kind of troubles and problems a cancer patient can go through. And if that person recovers from that, they will probably change the whole path of their life and career by devoting the rest of their life to helping people who are experiencing or going through cancer and so on, simply because of their life experiences. That event changed their career path or altered their perspective on the path of their life.

Many individuals who are deeply committed to social work often establish nonprofit organizations, also known as NGOs. Many of these individuals may have developed a desire to help others. It could also be very much linked to their personal life stories. Often, they create the idea of supporting a specific type of person simply because they have faced

those situations in their own lives. So that transforms them, and they completely change their career paths. So, in terms of traumatic events, sometimes they can create new possibilities for one's life that you were not at all thinking of before the event.

The fifth possibility of post-traumatic growth dimensions is spiritual and existential growth. So spiritual growth has always been linked to traumatic events, the sufferings of life, and so on. People ask more profound questions in life only when they go through difficulties. They will always ask, "Why me? Why is it happening to me?" People often engage with existential and more profound questions, as well as the spiritual aspects of life, when they face difficulties. It doesn't necessarily have to happen like that. However, for many people, the depth of their personality increases when a traumatic event occurs, or a problematic situation arises in their life. Many people embark on a spiritual path when they face difficulties and traumatic situations in life, prompting them to ask more profound questions, such as what the meaning of these experiences is. And in that sense, we can say they are growing spiritually. For many people, it can happen that way. Spiritual and existential growth can be expressed in terms of greater engagement with existential questions, such as the meaning of life and the meaning of all things, new insights into the existential problem and so on. So, there are five dimensions in which people report post-traumatic growth.

Most reports of people can be subsumed into these five categories. Now let us look into the empirical research findings in terms of what kinds of events or traumatic events lead to post-traumatic growth. Now, research suggests that PTG is a widespread experience. People report some form of PTG after a traumatic event; a lot of people, not everybody. In general, it has been claimed that the nature of the event itself is less essential for post-traumatic growth than the way in which the individual experiences it. The traumatic event itself is not what's important to determine, but instead how the person deals with it and interprets the event, because that is what leads to growth, not the event itself. That is why not everybody may grow out of it. It depends on how that person perceives the event and deals with it. So, the research has indicated that PTG can happen from diverse traumatic events.

Some of the events are listed here. People report post-traumatic growth after different kinds of personal losses, such as bereavement. When people are in a state of bereavement after the death of someone, when they go through medical problems, when they experience interpersonal violations such as rape and other forms of sexual assault, and community trauma such as natural disasters, and so these are some examples of how PTG can occur after all kinds of traumatic events. Research also indicated that work-related traumatic experiences could lead to PTG. So, the earlier events were mainly general traumatic events, but work-related traumatic experiences can also lead to post-traumatic growth.

PTG research remains surprisingly small in the context of work and organizational life. Although limited research is available, a small body of work has explored PTG in specific job contexts that are more susceptible to traumatic situations. Some jobs in work situations are very traumatic; the job itself is not easy. We must face a lot of traumas, you know, so inherently traumatic work and jobs include things like the military or defense sector, where people face a lot of traumatic situations daily. They encounter death, accidents, and other similar events. So, they must deal with a lot of traumatic events daily. So, the work itself can be very traumatic, and people report PTG in such work situations as well. Military and police are all defense-related jobs, which can be very traumatic for such people. People who work in emergency services, like firefighters, and so on or even in medical emergencies and so on, face death and the pain of people daily.

Such people also report PTG due to the traumatic events they experience in the work itself. People who work in disaster and rescue work, the research shows that they experience PTG in all these work-related situations as well. So, all these work-related situations can also prompt negative experiences in terms of PTSD. It can also lead to PTG. So, everybody in those situations doesn't need to experience PTG, but research shows that there is also the possibility of PTG in all these workplaces. There is also a possibility of disorder. So, it all depends on the person, and some of the factors we will discuss in the model. Sometimes, secondary trauma at work can also lead to PTG. Secondary trauma, in a sense, means you don't experience trauma yourself, but you look at other people's trauma and witness it in others' lives, which could be related to some of the jobs that we have already discussed. So, this is called secondary trauma. Secondary or vicarious trauma is a regular part of the job of professionals whose work can be traumatizing because it involves supporting others. Because the job itself is to support traumatized people. Some of the things we have already discussed.

Research indicated that PTG is prevalent among health professionals, including labor and delivery nurses, psychotherapists, social workers, interpreters, clergy, and funeral directors. These posts are found in many of these Western countries where there are funeral directors, and so on, these are job situations where you may encounter or see traumas in others' lives daily. So that is basically you are experiencing secondary trauma, not trauma on yourself, but you are witnessing trauma in others' lives. In many of these cases, PTG can also be experienced. PTG is linked to the change and growth that workers witness to their clients. So, they observe PTG in other clients, which can also stimulate growth in themselves, prompting a new appreciation for what is possible in terms of the difference they can make in those workers. In some cases, it may even prompt a spiritual broadening, as when they witness PTG in others who are going through numerous difficulties and overcome them; this can stimulate growth in the people seeing them. So, in such cases, empathic engagement with the client facilitates secondary PTG.

Thus, witnessing PTG in others can be a positively transformative experience. Sometimes, when you see other people growing out of trauma, it can give you a lesson as well. So, we can learn from their lives. That can also stimulate growth in individuals. Now, let's examine some of the models of PTG. How can we explain this entire process? One of the most popular models that is discussed in the literature is proposed by Tedeschi and Calhoun. In 2004, they proposed this, initiated research in this field, and coined the term "post-traumatic growth." They provided a model called a functional descriptive model to explain the process of post-traumatic growth, including why it occurs and what factors can facilitate it. So, we'll discuss this model and another model to gain a deeper understanding of the post-traumatic growth process.

So, Tedeschi and Calhoun proposed this functional descriptive model in 2004 to explain the process of PTG. In their model, they used a metaphor of an earthquake to explain this process of PTG. So, they used the metaphor of an earthquake to explain how PTG happens. They proposed that traumatic events are like seismic events that shatter our assumptive world. Shatters our assumptive world just like an earthquake shatter physical structure. So, they used a metaphor of an earthquake, which is a seismic event that destroys structures in the physical world, including buildings and other structures. Similarly, when a traumatic event occurs, it is like an earthquake in one's mental world. Trauma is like an earthquake in the cognitive realm. In the physical world, earthquakes can cause significant damage to structures. In the mental world, it destroys mental structures.

What are those mental structures? These are called assumptive worlds—our assumptions about life and our belief systems. Our future expectations are all assumptive in this world. We have many assumptions about ourselves, our future, and other people, among other things, many of these assumptions are shattered by a traumatic event. For example, one might think that one's life is very secure and fine. But let's say the whole source of security was coming from someone in their life, and suddenly that person dies. What will happen to this assumption? It will be completely shattered. Now, your whole assumption of life, a secure life, a good life, everything will vanish with the death of that person with whom this was linked. So, your whole assumptive world will get destroyed. So that is how a traumatic event destroys and shatters an assumptive world, just like an earthquake destroys physical structures. This assumptive world encompasses assumptions and beliefs about our lives and the world, which provide meaning and purpose and guide our behavior. Traumatic events can shatter all of this. So, this threat and shattering of the assumptive world give rise to significant psychological distress. Currently, many of these assumptions are being challenged, and we experience this as a source of distress. We experience a lot of pain and suffering because we cannot make sense of many things that happened after that event, it isn't easy to come to terms with that, and that experience is distress, pain, suffering, and so on. So, they extended this metaphor to suggest that what happens after the earthquake

obviously destroys all the structures, buildings, and so on. What do we do after that? We are trying to rebuild. The physical rebuilding that occurs after the trauma.

So generally, physical rebuilding are designed to be more resistant to shock in the future. What happens to us as a learning experience, as rational human beings, after earthquakes? If something gets destroyed, we try to rebuild it so that it is more resistant to future shocks. We rebuild it in a much stronger way, drawing on our learning experience, because earthquakes can destroy it. Therefore, we strive to build to the best of our abilities to make it more resistant to future shocks. Similarly, in the cognitive, in the mental world, when this trauma destroys your assumptive world, slowly, you cannot remain there, we tend to rebuild it. Now, this cognitive rebuilding that takes place after the trauma produces schemas that incorporate the trauma and possible future events and that are more resistant to being shattered.

Now, when you rebuild your mental world, it will be more resilient to future shocks because this experience of shock is already incorporated into the cognitive structure. Now you know this can also happen. So, it is much more resistant to future shocks. So, this is what leads to post-traumatic growth experiences, that you incorporate many traumatic events as a learning experience is an analogy; it is like a metaphor used to explain broadly how it can be understood. Now here they are saying PTG is not the direct outcome of trauma; it is the struggle with the new realities. They are focusing on it repeatedly. It is not the event that causes growth; rather, it is your perception and your approach to dealing with it that are more important.

Now, they have elaborately discussed various factors that could lead to post-traumatic growth. We will discuss their model briefly. This was the analogy that we used, but the model has many characteristics and aspects. Very briefly, their model is about to start from here. So, the seismic event is happening which is easily uncontrollable, potentially irreversible, and threatening. So that means a seismic event is a traumatic event that happens to a person. After that event, the individual's way of understanding the world was challenged, shaken, and shattered. As we have discussed, much of this assumptive world is broken. Then cognitive engagement happens for the person; the person tries to understand what is happening. Various thought processes lead the person to ask multiple questions. Why me? Why is this happening? And try to cognitively engage in making sense of the event. So, the individual cognitively engages in two domains; one makes sense of the event. They try to understand what is happening. It may take time. And second, making sense of the meaning of the event in their life. The event itself must make sense and then they try to make sense of the event's implications in their lives. So, they try to engage. And that can be an excruciating process. Because of new realities, you have to build again. Therefore, cognitive engagement is crucial. Generally, everybody goes through that. Then further cognitive processing occurs. Now this can be facilitated here through disclosure,

support, and narratives. So, if you have supportive people around you, they will also tell you many comforting things, and so on. The more you disclose and talk to people about the problems you are going through, the more likely you are to get support and the better support system you have. So, all these things will influence your life narratives. How do we explain your life? Individuals reconsider the basic assumptions about who they are, what the people around them are like, what kind of world they live in, and what future they have, among other things. All these things, the more they talk about it, disclose a better support system; they have social support. This will facilitate all these processes of coming to terms with the new realities of life, and this will enable the reconstruction of the shattered assumptions. So, if these things are present, the person is more likely to rebuild their destroyed mental world or shattered assumptions with new beliefs, new life goals, and so on, and that is what we are talking about as PTG or post-traumatic growth. So, this is a lump sum way of summarizing their model.

Their actual model looks like this. It is very similar to what we have discussed; the only difference is that specific variable names are used here. So, this is a model of what we have already discussed regarding the processes. That seismic event, which creates numerous challenges in one's life—managing emotional distress, setting goals, and crafting a narrative—all these are disrupted, so the person must face the challenges ahead to manage these things. When distress occurs, one of the reasons for it is rumination, which means people continue to think about why this has happened. This uncontrolled process is called rumination.

Initially, this process is very automatic and intrusive; you cannot control it. Thoughts keep coming, and you are unable to switch them off. Slowly, with the passage of time, there is a reduction in emotional distress and management of automatic thoughts. People slowly disengage, and with the passage of time, they can return to their routines, and then this rumination, which was initially very automatic and intrusive, becomes more deliberate and more conscious. This can lead to schema changes, narrative development, and other similar outcomes. This is facilitated by self-disclosure, which means that the more you talk about, write about, and process it, the more it will reduce a shift from automatic to more conscious rumination, thought processes, and narrative development, which is essential for post-traumatic growth to occur.

In the later model, they included something called sociocultural factors that can also facilitate post-traumatic growth. So, what they are saying is that not only your own self-disclosure and other things matter, but also the kind of sociocultural environment you have will also facilitate post-traumatic growth in terms of reducing emotional distress, automatic rumination, and so on. Sociocultural factors encompass both proximate and distal factors, which we'll discuss briefly. So, this was included in the later-updated model, and this is

how rumination, when it becomes more conscious and you settle back, leads to a new narrative change that is experienced as PTG. The sub-process is what we have also summarized earlier; however, more specific variable names are provided here. They are also saying that this distress can coexist with that. So here, distress and PTG can remain together. PTG can also be equated with narrative and wisdom development. So, people become wiser and so on. Now, let's examine the entire socio-cultural issue they discussed. So basically, these are what summarize the processes: social support, self-disclosure, everything can lead to post-traumatic growth, especially when this distressing phase happens after the event, and these intense cognitive processes start. This supportive network can aid in mental processing and help manage these emotions. The socio-cultural influences they have, which they update based on cultural research and so on, said these two factors can be present in socio-cultural influences that shape PTG. One is the proximate socio-cultural influence. These are immediate and direct factors that are present within and around us. These are close, personal, and immediate influences that affect how an individual processes trauma and fosters resilience. This may include your family and friends, community and social networks, healthcare and mental health services, regardless of whether these resources are available or not. So, these factors of support from family, friends, community, social networks, the healthcare system, and so on, are all proximate factors, whether they are present in your sociocultural environment or not.

So, if they are present, they will also facilitate your post-traumatic growth processes. And then the second factor is called distant sociocultural influences. These are broad and indirect factors that are in the culture itself. So, these are larger societal and cultural factors that shape beliefs and values regarding trauma and resilience. This may include aspects such as cultural narratives and belief systems surrounding suffering, resilience, and personal growth. What is there in your culture? How does your culture look at suffering, trauma, and so on. For example, many religions view suffering as a regular part of life. For example, one of the primary principles of Buddhism is that life is inherently marked by suffering. Therefore, a natural sense of acceptance may already be present, as it is ingrained in their culture. These cultural narratives, belief systems, and broader societal influences, which you absorb from society and culture, can all impact how you process trauma and whether it leads to growth or not.

The religious and spiritual framework associated with adversity, as well as one's own religious perspective on it, will also influence how it is processed. Even social and economic conditions, economic stability, education, and public policies can influence coping resources, among other factors. These are all broader, indirect factors that could be in our mind and influence our processing system. They can also affect whether PTG occurs or not. These sociocultural factors can be very important in determining whether PTG occurs or not. So, the most important thing is that, after the traumatic event, those automatic

ruminating thoughts should change to reflective thoughts that are conscious and deliberate. Initially, it becomes ruminative thoughts; then, with the supportive system and the factors we discussed, it can gradually change to reflective thoughts, leading to the development of new schemas and narratives. Then the person, the new understanding, and the rebuilding of schema—all of this happens, which leads to PTG. If this is not happening, then PTG will not occur. So PTG is closely connected to the development of wisdom, which is another term.

In general, this entire understanding and learning process can be equated to the development of wisdom. So PTG may not remove your pain, but enduring distress may coexist. So, there can be distress and growth happening side by side. This is one of the most prominent models in the literature that explains the process of PTG, detailing how it occurs.

There is another model that talks about PTG in terms of why PTG happens, under what conditions, and under what conditions PTSD occurs. This is also known as the Organismic valuing theory of PTG. It was proposed by Joseph and Linley in 2005. and it is called an organismic valuing theory of growth through adversity. So, this model also provides some alternative explanations of why PTG happens to some people and why some people develop PTSD and disorders. Based on the principles of humanistic psychology, it is suggested that human beings have inherent tendencies toward growth and actualization. So one of the foundational principles of this model is that human beings are growth oriented. Everybody wants to grow in their life. No one wants to experience stagnation or go backward. No one wants that. It may occur due to specific situations, but intrinsically, everyone wants growth and expansion in their lives. So, that's the humanistic principle. So, PTG is inconsistent with this. Even if difficulties arise, people want to grow out of them. So, this is a natural tendency for all of us. Consistent with these tendencies, they exhibit intrinsic motivation to rebuild the assumptive world in the aftermath of trauma. Therefore, people strive to rebuild their lives in a way that allows them to move beyond it because the tendency is inherent in all of us. So, this tendency leads to growth. So, they suggested that there could be three possible cognitive outcomes after a traumatic event. So, they say after a traumatic event, there are three possible outcomes. One is called assimilation, which helps to return to the pre-trauma baseline level. So, assimilation means you add information to your life that was going in a certain way; some event happened, and it doesn't change you mentally. You add one more piece of information to your mind. Okay, the XYZ event has happened to me. So that is called assimilation. You add one more piece of information to your whole scheme of things. You don't change. There are no transformations. Then you return to your pre-trauma baseline level. This can be referred to as resilience. So, this can also be called accommodation, but it can also take a negative form. Now, accommodation means your whole scheme of things changes. The whole perspective on looking at things changes. So, your interpretation, your schemas, everything changes and transforms.

However, it takes an adverse turn. So, if something negative happens, your whole perspective of life changes. But it is in the negative direction where you become hopeless and see all the negative things that happen, which can be very common after a traumatic event.

So those negative accommodations can result in psychopathologies such as PTSD. But this accommodation can also happen in the positive direction, which can result in PTG. That means some mental transformation occurs, changes take place, and your perspective shifts, but it is in a positive direction. You look at new possibilities and so on, in whatever dimension we talk about. Then, if all this happens in that direction, it can lead to PTG. This theory also emphasizes the social environment as a facilitator of the actualizing tendency, which is essentially needed for growth. Therefore, if the social environment fosters these growth tendencies, then people who are more likely to experience PTG or positive accommodation to occur. Now, let's examine some key findings. Numerous empirical findings are available on the relationship between PTG and well-being. In general, it appears that reports on PTG, especially when sustained, predict better subsequent well-being.

Most of the literature and findings indicate that PTG leads to better well-being, or that the well-being dimension increases. Disaster workers who experience post-traumatic growth tend to feel they have gained self-esteem, a sense of accomplishment and meaningfulness in their work, and a better understanding of the world. This study demonstrates how PTG can be linked to specific dimensions of well-being, particularly eudaimonic well-being. In a meta-analysis of 87 cross-sectional studies related to PTG and health outcomes, growth was found to be positively associated with measures of well-being, including self-esteem and life satisfaction, and negatively associated with depression.

At least, most research indicates that PTG may lead to higher well-being. That doesn't mean the distress will be absent. The only thing is that various indicators of well-being, like most of them, are in the eudaimonic dimensions. People's experience of well-being can increase when PTG co-occurs. Now PTG has been equated with wisdom. That means PTG dimensions are almost the same as the development of new wisdom in one's life. Wisdom is generally considered a psychosocial maturity that integrates cognitive, reflective, and emotional aspects of personality. Wisdom is often regarded as a form of maturity that encompasses the mental, reflective, and emotional aspects of oneself. So, if one becomes mature in those dimensions, then we can say that the person is becoming wiser. The concept of wisdom often evokes a stereotypical image of old, wise men. Generally, the typical understanding of wisdom is that as people age, they become wiser, with the idea that they have experienced many things in their lives, learned many things, and become wiser. Wisdom accumulates through life experiences, and it has been reported that age affects the

depth of wisdom, with life wisdom advancing as one ages. Research also indicates that with the passage of time and as age progresses, wisdom generally increases.

Wisdom can be differentiated from PTG. Wisdom is a broader concept that can be found throughout the lifespan of human development and is not restricted to post-traumatic situations. Again, wisdom is a broad term that can develop from different life experiences, not just traumatic events. So again, PTG is not conceptually the same as wisdom. Wisdom is a broader term that can emerge across the lifespan through various life experiences, and it is not limited to trauma. Trauma can be one indicator. Wisdom may develop through traumatic experiences, but it is not necessarily limited to them.

So, this is how conceptually these two terms are different. However, many of the dimensions of PTG are equated with the notion that a person has become wiser. PTG was equated and co-varied with the development of wisdom in the model, as discussed in Tedeschi and Calhoun's model (2004). In fact, the domains of PTG encompass aspects of wisdom; however, the terms are conceptually distinct. Although PTG and wisdom have been conceptually linked, few empirical studies directly link the two concepts. Although there is limited empirical evidence available, conceptually, they are distinct. The domains are very similar, much like the dimensions of wisdom. Now, at the end, let's discuss how we can facilitate post-traumatic growth. Some of the factors were already addressed in the functional descriptive model, which shows what can facilitate PTG.

Now, let us examine some of the other broader factors in more detail. If they are present in one's life, the person is more likely to experience post-traumatic growth after the traumatic events. Tedeschi and Calhoun suggested in 2006 that post-traumatic growth is facilitated by expert companionship. They used a term called "expert companionship." If that is present, then PTG is more likely to occur after the traumatic events. So, these expert companions are people who can listen for extended periods and repeatedly to stories that can involve horror, fear, guilt, shame, and confusion, and expert companions cannot prescribe post-traumatic growth. These are the people who can listen empathetically to the stories of others. Whatever the traumas they face, the stories of horror, fear, guilt, shame, and confusion, if people, after going through a traumatic event, can express all these things to someone, we can call that person an expert companion, and it can facilitate PTG happening. So, they facilitate it through kind and empathetic listening, they may be professionals, friends, or family members. It could be anyone. It could be a professional or a counselor, it could be a friend or family member who, if such people are present, is generally more likely to experience PTG. This is a crucial factor. They also discussed other factors that Calhoun and Tedeschi outline.

More specifically, there are five ways to facilitate PTG. One is about education. Education is not in the typical sense of education. They are talking about the importance of understanding and educating oneself about trauma, how it is caused, and the disruptions of

core beliefs to facilitate growth. So, if you understand what this trauma is doing to you in terms of having more insights about its impact, if you can educate yourself on how it can affect you, if you know more about the effects of trauma and how it influences you, how are you able to cope with this, and so on? So, education in that sense. That can come from life experiences, or it can come from someone else talking about them. You can also read about it in some books, and so on. So those things are being called education. The more you understand the traumas, the different aspects of it, and how it is impacting you, the better you can cope with that. Education can all be considered, and it will help you navigate and grow out of those situations. So, it is essential to make sense of the trauma and understand that when a traumatic event shatters our life assumptions, it is painful, confusing, and frightening, and may lead to anxiety and repetitive thinking about the traumatic event, such as, "Why did this happen to me?", "What should I do now?", and so on.

This is a very natural process. All this education will help you make sense of the event. And the more you can make sense of the event, the more you are likely to, you know, come back and grow out of it. So, processing trauma in this way is normal and may stimulate growth. An expert companion may facilitate this educational process. Therefore, expert companion will serve as a protective factor in all these factors and will be connected to them. Education can come from expert companions—such as friends, family, and counselors, whoever is available, depending on the situation; they can also facilitate this factor. Second is emotional regulation. Obviously, this is very important. If you cannot regulate your emotions after trauma, they will linger for a very long time. So, learning to regulate emotions and reduce psychological distress is crucial for PTG. Obviously, some disturbance and some impact of trauma are necessary for transformation, but if the person is too overwhelmed by it, it will lead to PTSD and other problems. At least some level of regulation is necessary to process it consciously. Managing negative emotions helps us regain our composure and adopt the right frame of mind for deliberate and reflective thinking, which is crucial. Some levels of emotional management is fundamental, so that you can regain your composure and have the right frame of mind to assess what is happening and reflect on these things consciously. That is very important; reflective thinking is crucial for PTG. One needs to engage in constructive coping, such as shifting one's thinking from loss, failures, uncertainties about success, and possibilities to available resources to deal with the situation.

So, whatever helps you regulate your emotions, constructive coping, shifting your thinking, acceptance, and so on. There are various ways to regulate emotions. If they are present, that will facilitate the process. Coping strategies such as social support, breathing exercises, and meditation can all be helpful. Anything that helps you regulate emotions can facilitate post-traumatic growth. The third factor is self-disclosure, which was very elaborately listed

in the model or functional descriptive model. It is always good to talk about what has happened, what is happening, what you are struggling with. Such self-disclosure helps in the processing of trauma, facilitates finding solutions to problems, and increases the likelihood of receiving support. The more you disclose what is going on in your mind after the trauma, the better you will feel relief, you will be able to escape a lot of this emotional turmoil, and you are more likely to receive the support of others. If you don't discuss it, people are unlikely to support you because they may not be aware of what's happening. Social support is strongly linked with self-disclosure. So, the more you talk about it, the more you process it. Even research shows that even if you cannot find trustworthy people to talk to about it, you can write about it based on whatever experience you have. That also helps you process the information more consciously. All these things can facilitate meaning-making and reflective thinking, which are crucial for PTG. It enables you to make sense of the event and become more aware of what is happening, which is more critical for PTG to occur. Again, expert companions who can be connected to all aspects can facilitate this process by encouraging trauma survivors to disclose details about their experiences, which they can begin to work on together and understand.

Self-disclosure is also a form of writing. Sometimes, diary writing and other forms of writing can facilitate PTG. For instance, if there are no trustworthy people to talk to about it, even writing about it can be helpful. The fourth one is narrative development. Narrative is about how you describe your life in terms of how you perceive it; it discloses your perspective on looking at your own life. Therefore, the rebuilding of our cognitive structures and assumptive world is closely tied to the development of narrative. So rebuilding or reconfiguring core life assumptions, beliefs, and life stories into a coherent narrative are crucial for PTG. So, are you able to develop a cohesive new narrative after the event again? That is what reflects PTG in terms of narratives. These new versions of the life narrative will incorporate some of these domains of post-traumatic growth. If they include, then the PTG will occur. So, if your perspective changes positively, you view the meaning of relationships in a more positive light. So, your new life narratives, if they include some of the dimensions of PTG, will translate into PTG, and you are more likely to experience it.

The development of coherent life narratives is crucial for moving on to the next chapter of life. Otherwise, we may be stuck with the event and older narratives. So, if you are stuck with the older narratives of life, you will remain there. You have to rebuild your narratives, a new narrative, which incorporates the new realities of life, and then it will lead to PTG. Therefore, narrative development is crucial. Again, it can be facilitated by expert companions, as discussed earlier. The last one is about services. PTG is facilitated by serving, benefiting, and helping other close people, the community, and especially trauma victims like themselves. Sometimes people can grow, as we have already seen, and

experience PTG when they also help other people. People also grow when they serve, benefit from, and help others, especially those who are going through similar traumatic situations. That by looking at other people's lives and so on can also stimulate growth. Sometimes, serving and helping others in similar situations can serve as a catalyst for personal growth. So, these are some of the things about post-traumatic growth. We have discussed and tried to understand the various dimensions of it and some of the possibilities or factors that can facilitate post-traumatic growth in our lives. With this, I will conclude. Thank you.